

niently reckoned from the lowest and thickest part of the Bubble upwards.

O B S. XIX.

Viewing in several oblique positions of my Eye the Rings of Colours emerging on the top of the Bubble, I found that they were sensibly dilated by increasing the obliquity, but yet not so much by far as those made by thin'd Air in the seventh Observation. For there they were dilated so much as, when viewed most obliquely, to arrive at a part of the plate more than twelve times thicker than that where they appeared when viewed perpendicularly; whereas in this case the thickness of the Water, at which they arrived when viewed most obliquely, was to that thickness which exhibited them by perpendicular rays, something less than as 8 to 5. By the best of my Observations it was between 15 and $15\frac{1}{2}$ to 10, an increase about 24 times less than in the other case.

Sometimes the Bubble would become of an uniform thickness all over, except at the top of it near the black Spot, as I knew, because it would exhibit the same appearance of Colours in all positions of the Eye. And then the Colours which were seen at its apparent circumference by the obliquest rays, would be different from those that were seen in other places, by rays less oblique to it. And divers Spectators might see the same part of it of differing Colours, by viewing it at very differing obliquities. Now observing how much the Colours at the same places of the Bubble, or at divers places of equal thickness, were varied by the several

several obliquities 4th, 14th, 16th hereafter explained requisite to exhibit several obliquities expressed in this

Incident the W	deg.
	00
	15
	30
	45
	60
	75
	90

In the two firstties of the rays is, their Angles I suppose that round numbers a lution of Soap refractive Vertue of the Bubble, and in those several o ten constitute the dicular.

I have sometimes arise on polished and some other m